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**Select Abstract:**

***Carbapenem-Resistant Klebsiella pneumoniae Producing New Delhi Metallo-Beta-Lactamase at an Acute-Care Hospital — Denver, Colorado, 2012***

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**Background:** Carbapenem-resistant *Klebsiella pneumoniae* (CRKP) are highly transmissible and cause health care–associated infections with >40% mortality. New Delhi metallo-beta-lactamase (NDM)-producing CRKP are rare in the United States. After two patients at a Denver hospital were identified with NDM-producing CRKP during July–August 2012, an investigation was conducted to characterize the outbreak and prevent transmission.

**Methods:** CDC tested CRKP isolates by polymerase chain reaction for NDM. A case had NDM-producing CRKP isolated from clinical or active surveillance cultures (ASC) of rectal swabs collected during January 1–October 30. Cases were identified through microbiology record reviews and six rounds of ASC on units where affected patients had resided. Medical records were reviewed for epidemiologic links; relatedness of CRKP isolates was evaluated by pulsed-field gel electrophoresis (PFGE) and whole-genome sequence analysis (WGS).

**Results:** A third patient, admitted in May, was identified through microbiology records review. ASC identified five additional cases. Patients were aged 23–75 years and had resided on 11 different units (median stay: 18 days; range: 12–83 days) before case identification; three were treated for infection; five were asymptotically colonized, and none died. All isolates were highly related by PFGE. WGS suggested three primary clusters of CRKP. Combining WGS results with epidemiology identified three units as likely transmission sites.

**Conclusions:** A 4-month outbreak of NDM-producing CRKP occurred at one hospital, highlighting the risk for spread of these organisms. PFGE did not sufficiently differentiate among case isolates, but combining rapid WGS with epidemiologic links indicated transmission primarily occurred on three units and might be useful for guiding control measures in real time. ASC, combined with reinforcing infection prevention measures, were required to control transmission.

**Keywords:** cross infection, drug resistance, microbial, beta-lactamases, sequence analysis, DNA